

REMARKS

This is a full and timely response to the Office Action mailed September 22, 2003 (Paper No. 15). Reexamination and reconsideration in light of the above amendments and following remarks are courteously requested.

Claims 68-79 are now pending in the application, with Claims 68 and 79 being the independent claim. Claims 36-67 have been canceled, and Claims 68-79 are newly presented herein. No new matter is believed to have been added.

Rejections Under 35 U.S.C. § 112, First Paragraph

Claims 60-67 were rejected under 35 U.S.C. § 112, first paragraph, as allegedly being directed to subject matter not described in the originally-filed application. In response, and while not conceding the propriety of this rejection, Applicant has herein canceled these claims, thereby mooting this rejection.

In view of the above, Applicant respectfully requests reconsideration and withdrawal of the § 112, first paragraph rejection.

Rejections Under 35 U.S.C. § 102

Claims 60-62, and 64-66 were rejected under 35 U.S.C. § 102 as allegedly being anticipated by U.S. Patent No. 5,343,116 (Winsor '116). This rejection is respectfully traversed.

Independent Claim 68 relates to a lamp that includes a substrate having a channel formed therein. The channel has at least a first end and a second end, and a plurality of adjacent channel segments configured in series with one another. Each of the channel segments has at least a first end and a second end, and is configured to emit light in response to an activation voltage being applied between its first and second ends. A plurality of activation electrodes are coupled to the channel, each of which is adapted to couple to a lamp activation power supply. Independent Claim 68 recites, *inter alia*:

each channel segment shares either its first end or its second end with the second end or first end, respectively, of its adjacent channel segment, to thereby form a common activation electrode area therebetween, at least one activation electrode is coupled to each end of the channel, and at least one activation electrode is coupled to each common electrode area.

Independent Claim 78 relates to a method of starting a lamp configured substantially identical to the one recited in independent Claim 68, and recites, *inter alia*:

applying an activation voltage of a magnitude between the first and second ends of each channel segment, wherein the magnitude of the activation voltage applied between each channel segment first and second ends is substantially equal.

A lamp constructed in accordance with at least independent Claim 68, allows implementation of the method recited in independent Claim 78, by effectively reducing the length of the channel. In particular, the channel is essentially partitioned into a plurality of channel segments by adding activation electrodes to the channel. This provides significant advantages over known lamps, including those disclosed in Winsor '116. The major advantage of the claimed invention is that the voltage magnitude needed to activate the lamp is significantly reduced, which in turn significantly reduces the size and/or stresses on the power supply, the wiring between the lamp and power supply, and the lamp mounting structure.

Winsor '116 relates to planar fluorescent lamps having a serpentine path formed in a discharge chamber (12). Winsor '116 discloses that end (e.g., "activation") electrodes (30, 32) are disposed at each end of the serpentine path, and that sidewall electrodes (38a-c, 40a-c) are disposed along two sidewalls (14, 16) of the chamber (12). The end electrodes (30, 32) are disclosed as being used to create an electric plasma arc (see col. 8, ll. 41-43), and the sidewall electrodes (38, 40) are disclosed as performing four functions. These four functions include increasing overall brightness (col. 3, ll. 61-62), increasing light output uniformity (col. 3, ll. 62-66), increasing the brightness range over which the lamp may be operated (col. 4, ll. 4-28), and aid in starting the lamp (col. 4, ll. 29-37). To implement these functions, Winsor '116 discloses that individual AC power supplies (34, 42, 44, 46) of differing frequencies are supplied to the end electrodes (30, 32) and each pair of sidewall electrodes (38, 40) (col. 5, ll. 1-52).

Hence, Applicant submits that Winsor '116 fails to disclose at least the above-noted features of independent Claims 68 and 79. Namely, Winsor '116 fails to disclose at least one activation electrode is coupled to each end of the channel, and at least one activation electrode is coupled to each common electrode area, as recited in independent Claim 68, and fails to disclose applying an activation voltage of a magnitude between the first and second ends of each channel segment, wherein the magnitude of the activation voltage applied between each channel segment

first and second ends is substantially equal, as recited in independent Claim 79. Rather, Winsor '116 discloses including only two activation electrodes, one on each end of the channel, and supplying a single activation voltage between these two electrodes. This is quite different than Applicant's inventive concept, as defined at least by the independent claims.

In view of the foregoing, Applicant respectfully request reconsideration and withdrawal of the § 102 rejection.

Rejections Under 35 U.S.C. § 103

Claims 63 and 67 were rejected under 35 U.S.C. § 103 as allegedly being unpatentable over U.S. Patent Nos. 5,343,116 (Winsor '116), and 6,218,776 (Cull et al.). This rejection is respectfully traversed.

Cull et al. relates to flat fluorescent lamps. However, this citation is not understood to make up for at least the above-noted deficiencies of Winsor '116.

In view of the above, reconsideration and withdrawal of the § 103 rejection is respectfully solicited.

Conclusion

Based on the above, independent Claims 68 and 79 are patentable over the citations of record. The dependent claims 69-78 are also submitted to be patentable for the reasons given above with respect to the independent, and because each recites features which are patentable in its own right. Individual consideration of the dependent claims is respectfully solicited.

The other art of record is also not understood to disclose or suggest the inventive concept of the present invention as defined by the claims.

Applicant submits that the present application is in condition for allowance. Favorable reconsideration and withdrawal of the objections and rejections set forth in the above-noted Office Action, and an early Notice of Allowance are requested.

If the Examiner has any comments or suggestions that could place this application in even better form, the Examiner is requested to telephone the undersigned attorney at the below-listed number.

Respectfully submitted,

By:
Paul D. Amrozowicz
Reg. No. 45,264
(480) 385-5060

Dated: December 22, 2003

Ingrassia Fisher & Lorenz
Customer No. 29906